

The Study of Internet Addiction with Depression, Anxiety and Social Isolation

Wan Soraya Wan Abdul Ghani¹, Nureliyana Ramlee², Nurakmal Ramli³,
Hafizi Zamri⁴ and Ayu Rohaidah Ghazali⁵

^{1,2,3,4,5}Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Selangor Malaysia.

wansor2956@uitm.edu.my^{1*}
nureliyanaramlee@gmail.com²
nurakm2956@uitm.edu.my³
muhamm9811@uitm.edu.my⁴
ayuroh2956@uitm.edu.my⁵

Corresponding author*

Received: 17 June 2019

Reviewed: 5 August 2019

Accepted: 30 August 2019

Abstract

The internet is an instrument that is utilized as a fundamental part of daily life throughout the world. Undoubtedly, the internet is a revolution in information technology. However, internet addiction is becoming a problem among some users as the usage of the internet is growing rapidly each year. Therefore, this study aimed to determine the relationship between internet addiction and developing of anxiety, depression and social isolation. Based on the sample size, 61 respondents were used to participate in this study. Census technique was applied in the distribution of the questionnaire. The results shown that there is a positive relationship between internet addiction towards developing anxiety, depression and social isolation. However, new studies are required to document the efficacy treatment of for the subjected issue. Further discussion on the results are shared in this paper.

Keywords: Internet addiction, anxiety, depression, social isolation

1. Introduction

Recent developments in internet access and usage in the world have heightened year by year. Such upward trend has been associated with people's digital need and motivation. In recent years, there has been an increasing interest in body of research investigating what kinds of Internet use that associated with Internet abuse (Zhang, Lim, Lee and Ho, 2017). There was an argument that when technology evolves, the concerns regarding technology will evolve (Steven, 1999). Nevertheless, Morahan–Martin (2008) observed that serious effect on the patterns of using the Internet that result in disturbances in a person's life can be associated with excessive or unregulated usage. Preliminary work on internet addiction was undertaken by Soulioti, Stavropoulos, Christidi, Papastefanou and Roussos (2018) in which the authors found that people prefer to invest their time and energy in the virtual world of the internet. Thus, they isolated themselves from the surrounding and live in a virtual environment as they choose to withdraw their emotional investments from face to face communication. Similarly, Izanloo and Goudarzi (2011) found that excessive use of the Internet cause social isolation and a reduction in social relations. The study acknowledged Internet usage cause serious disturbances that lead to addiction despite various approaches to the conceptualization of the

condition, which is still developing and negotiated in ongoing research (Morahan–Martin, 2008). In another major study, Singh (2014) reported that the individuals who become addicted to the internet resulted negative consequences from it such as depression, anxiety and anger. In the same vein, questions have been raised with the prolonged use of internet as Busari (2016) in his study set out to determine Internet addiction and found effect of internet addiction were anxiety, stress and depression. The studies presented thus indicates the need to understand the disturbance of internet addiction and the relationship towards anxiety, depression and social isolation.

2. Literature Review

This study attempted to examine the Internet Addiction towards depression, anxiety and social isolation.

2.1 Depression

Improper or excessive use can produce many negative consequences over internet in the era of global communication (Odacı & Çelik 2013). Research finding by Bernardi & Pallanti (2009) also point towards correlations between internet addiction and depression. This is supported by other authors which reveal the positive relationship between depression and internet addiction (Bahrainian, Alizadeh, Raeisoon, Gorji, & Khazaei, 2014).

Moreover, preliminary work on observing depressive people was undertaken by Yang, Choe, Baity, Lee & Cho Low (2005) and the researchers pointed that low self-esteem, low motivation, fear of rejection and the need for confirmation from others may resulted from frequent use of the internet. Besides, the interactive functions may lead to internet addiction in individuals with these characteristics.

In another study, Aakin & Iskender (2011) suggested that the reduction of the activity may reduce the level of depression. The authors added that the dependency on internet and sorrow lead to internet abuse which brings about a disturbance of an individual and the general population. It is apparent that this might remove important time that individuals go through with family and companions.

2.2 Anxiety

The most issues that can be identified which normally connected with Internet is social anxiety. Individual who is addicted will invest the greater part of their energy to involving basically, to the point they wind up restless to confront individuals, all things considered. Egger and Rauterberg (1996) found that anxiety will cause to bodily discomfort and stress in their study regarding Internet addiction, the person who have experience the symptom of bodily discomfort and stress regularly will facing a lot of difficulties to conveying and cooperation with others in a positive way.

Meanwhile the investigation from Azher, Khan, Salim, Bilal, Hussain, and Haseeb (2014) between internet addiction and anxiety understudy showed that 34% of understudies are having medical issue, both physically and rationally because of Internet addiction and dependence. Besides, another factor that will be considered as Internet addiction sign is nervousness. Based on

Lin and Tsai (2002) studies, sensation pursuing will be affected, individual emotional in a poor condition level are noticeable. Nevertheless, Ahmadi, Zadehmohammadi, Masoombeigi & Sohrabi (2012) believe that the internet user might have used Internet as an excuse, and this probably designates that when a person does not have access to the Internet get anxious and to reduce their anxiety uses Internet.

2.3 Social Isolation

Yang (2001) found that the particularly noticeable cause of the Internet is related with social interaction and unsuitably adapted for individual as it will decreases in the quality of group of friends. In addition, Ko, Chen and Yen (2005) stated that lacking element of confident level and life satisfaction will take place as they distance themselves off from others. The researchers believed that Internet addiction was related positively and affected to decrease in social interactions, depression, loneliness and lower self-esteem.

Vinas (2009) confirmed that Internet misuse has its consequences, both psychological and behavioural among young people. Tonioni, D'Alessandris and Lai (2012) agreed that such consequences include the emergence of possible behavioral alterations, loss of control, school failure, social isolation and an increase in family conflict. Meanwhile, according to Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay and Scherlis (1998) research, people who constantly use the internet non-stop, and have no adequate time for social activities have lower social skills. In addition, Tiwari and Ruhela (2012) mentioned that if the extent of social interaction increases, extent of internet usage may also be decreases. Their poor self-esteem can cause them to have poor communication skills and feelings of isolation. It also can create additional problems in life, such as difficulties in working with groups, moving to social activities or even doing a presentation.

According to research by Wilson, Gosling and Graham (2012), when an individual does not receive any interaction neither from the community nor from family and friends, their emotion and interests will be focusing on the internet and they prefer to spend their time on internet and maintains the virtual relationship. Likewise, Martin and Schumacher (2000) stated in their study that social interactions and happiness will be reduced with the extreme dependence of the virtual world with detachment from reality and physical inactivity in the associated person. Hence, the person becomes more addicted to internet and slowly will resign from the community.

The result of Sharifpoor, Khademi and Mohammadzadeh (2017) study showed a positive significant relationship between social isolation towards internet addiction. They prefer to spend their time with internet, feel better in virtual world and so get more attracted to the internet and gradually become addicted to it (Perlman, 2004).

2.4 Internet Addiction

Young (2004) defined Internet addiction as an overwhelming of desire to use the Internet whereby the reduction of time spent without connecting to the Internet cause intense nervousness and aggression in the event of deprivation, and progressive deterioration of social and family life. Therefore, the internet addict becomes connected to the Internet for longer periods with increasing depression and loneliness (Mohammadkhani, Alkasir, Pourshahbaz, Jafarian Dehkordi & Soleimani Sefat, 2017).

However, Singh (2015) argues that the internet is not an enemy, but the people rely upon its false appeal for emotional and psychological needs. In a study which set out to determine the level of addiction, Young (1998) reported that most Internet addicts have a history of depression and anxiety. This view is supported by Greenfield (1999) who write that mental disorder, depression and social problems were closely related to internet addiction. Report listed from Young (2004) shows that internet dependent was highly rated with 39 hours per week spent on online rather than non-dependent rate that is five hours.

Nevertheless, Kuss & Lopez-Fernandez (2016) argue that despite the proliferation, internet addiction in term of its existence and the condition has not yet been understood very well. In 2017, Rabadi, Ajlouni, Masannat, Bataineh & Batarseh published a paper which they highlighted that excessive internet use may create a heightened level of psychological arousal and limited physical activity. They argue that possibly leading to the user experiencing physical and mental health problems. A broader perspective needs to take place to analyse potential disorder that has not yet been officially recognised.

Accordingly, the following hypotheses were proposed:

- H1: There is a significant positive relationship between internet addiction with depression
- H2: There is a significant positive relationship between internet addiction with anxiety
- H3: There is a significant positive relationship between internet addiction with social isolation

3. Methodology

The paper primarily used correlation study to facilitate the decision to test variables that been used as predicament for the criterion. This research is designed to investigate the relationship between internet addiction towards depression, anxiety and social isolation. The sample was drawn from one international school employees from academic department (Internet users) in Klang Valley, Malaysia. A self-administered survey was conducted with 61 sets of questionnaires were distributed to the respondents using census which take complete count. This technique is used as it should suit the needs and resources for researcher to obtain the data. The required data for this study were collected by using survey instrument which consists of a set of structured questions. These data were coded and analysed using SPSS Version 23. The response rate for this study was 100% and thus, total questionnaires analysed were 100% (n=61) from the sample size.

4. Results and Findings

4.1 Demographic Profile of Respondents

Table 1. Respondent's Profile

		Frequency	Percentage
Gender	Male	21	34.4
	Female	39	63.9
Age of Respondent	20-29 years old	20	32.8
	30-39 years old	27	44.3
	>40 years	14	23
Race of Respondent	Malay	18	29.5
	Chinese	21	34.4
	Indian	11	18.0
	Others	11	18.0
Years of Employment	<5 years	61	100
	6-10 years	0	0
	11-20 years	0	0
	>21 years	0	0

As shown in Table 1, out of 61 respondents, male represented 34.4% of the respondents and female 63.9%. Most of the respondents aged between 30-39 years old with 27 (44.3%) of respondents and only 14 (23%) respondents aged 40 years old and above. With regards to the race of respondents, 21 (34.4%) were Chinese and 18 (29.5%) were Malay while remaining 11 (18%) were both Indian and others. Besides, majority of the respondents, 61 (100%) had work more than 5 years.

4.2 Reliability Analysis

Table 2. Reliability Analysis

Variables	Cronbach's α	Number Item (n=5)	Degree of Reliability
Depression	.801	5	Very High
Anxiety	.849	5	Very High
Social Isolation	.897	5	Very High
Internet Addiction	.889	5	Very High

Table 2 indicates the result of reliability analysis. Reliability can be referred as the degree of scale that generates reliable result if repetitive measurement made by computing the Cronbach's alpha score. A Cronbach's Alpha is a reliability coefficient that indicated how well the items in a set are positive correlate to one another. The Cronbach's alphas for all the variables are in the range of 0.801 to 0.897 which indicates that the items measured were well understood by the targeted respondents. Hence, it is reliable and all acceptable to be used as survey questions to respondents.

4.3 Correlation Analysis

Table 3. Correlation Analysis

Depression	Pearson	.740**
	Correlation	
	Sig. (2 tailed)	.000
	N	61
Anxiety	Pearson	.774**
	Correlation	
	Sig. (2 tailed)	.000
	N	61
Social Isolation	Pearson	.832**
	Correlation	
	Sig. (2 tailed)	.000
	N	61

Correlation analysis was performed to examine the relationship between internet addiction towards depression, anxiety and social isolation. The Pearson Correlation was performed to assess the association between the three distinct form. Result shows that there is a significant relationship which it suggests that internet addiction can cause a depression. The result has been concurred by Yucens and Uzer (2018). Based on Table 3, the Pearson correlation test has proven that there is a strong relationship between the two variables ($r = .740$, $p=0.000$). Next, anxiety indicates ($r=0.774$, $p=0.000$) and social isolation ($r=0.832$, $p=0.000$).

4.4 Summary of Hypothesis Testing

Table 4. Summary of hypothesis testing

Hypothesis	Result
H1: Depression – Internet Addiction	Supported
H2: Anxiety - Internet Addiction	Supported
H3: Social Isolation - Internet Addiction	Supported

5. Findings and Discussion

Based on correlation analysis, the positive relationship showed that internet addiction has direct and significant relationship with depression, anxiety and social isolation. This is consistent with the findings conducted together with other research by Akin & Iskender (2011). Internet addiction is a growing problem and there will exist a possibility that it is prevalent in our environment and locality. This problem can be seen at any age group with higher incidence among adolescence. Another study by Martin and Schumacher (2000) also concluded that Internet addicted users were relatively lonelier and more depressed as compared to those who had no signs of dependence on Internet. There are a lot identified factors that contribute to the development of internet addiction and individual will affect their work performance and self -esteem. The research

objectives have been achieved and all variables prove strong relationship. Therefore, it can be concluded that H1, H2 and H3 are all accepted.

6. Conclusion

This study examines the relationship between internet addiction with depression, anxiety and social isolation. Research which related to gender differences for respondents need to be identified to understand if there is any potential cause that possibly linked by gender. Likewise, it can be in a focus group to sync with understanding type of users that addicted to the internet. Thus, added value of the academic study to the industrial practices in order to confirm these results and explain in more depth the factors which determine internet addiction can be achieved. Young (2007) suggested to have cognitive behavioural therapy programme to replace cognitive distortions and behavioural style to strengthen depressive feeling supported. The indication of methods or techniques can be varied such as interview session or observation for detailed explanation and feedback rather than solely rely on questionnaires method. Additionally, larger sample size and different location may give different result. The author believes that the reason behind the addiction is not very clear. The view has been supported by Menon, Shanker, Narayanan, Lakshmi and Kahwaji (2018) as the authors proposed for further investigation. The findings for future research can be used to understand affecting cause of internet addiction.

References

- Ahmadi, H., Zadehmohammadi, F., Masoombeigi, M., Sohrabi, F. (2012). Prevalence of internet addiction and its relationship with demographic factors among students of Allameh Tabatabai University. *J Education Psychoogyl*, 8(25), 19-34.
- Akin A, Iskender M. (2011). Internet addiction and depression, anxiety and stress. *International online Journal of Educational Sciences*, 3(1):138-48.
- Azher, M., Khan, R. B., Salim, M., Bilal, M., Hussain, A., & Haseeb, M. (2014). The relationship between internet addiction and anxiety among students of University of Sargodha. *International Journal of Humanities and Social Science*, 4(1), 288-293.
- Bahrainian, S. A., Alizadeh, K. H., Raeisoon, M. R., Gorji, O. H., & Khazaei, A. (2014). Relationship of Internet addiction with self-esteem and depression in university students. *Journal of preventive medicine and hygiene*, 55(3), 86–89.
- Busari, A.O. (2016). Academic Stress and Internet Addiction among Adolescents: Solution Focused.
- Egger, O., & Rauterberg, M. (1996). Internet behavior and addiction. *Thesis (Swiss Federal Institute of Technology, Zurich, 1996)*.
- Greenfield, D. N. (1999). Virtual addiction: Help for netheads, cyberfreaks, and those who love them. *New Harbinger Publications*.
- Izanloo, M., and Goudarzi, C. (2011). The Relationship between Internet Addiction and Social Isolation and Quality of Social Interaction, *First Congress of Social Psychology*, 1 & 2, pp. 37-40.

- Ko, C. H., Yen, C. F., Yen, C. N., Yen, J. Y., Chen, C. C., & Chen, S. H. (2005). Screening for Internet addiction: an empirical study on cut-off points for the Chen Internet Addiction Scale. *The Kaohsiung Journal of Medical Sciences*, 21(12), 545-551.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.
- Kuss, D. J., & Lopez-Fernandez, O. (2016). Internet addiction and problematic Internet use: A systematic review of clinical research. *World journal of psychiatry*, 6(1), 143-76. doi:10.5498/wjp.v6.i1.143
- Lin, S. S. J., & Tsai, C. C. (2002). Sensation seeking and internet dependence of Taiwanese high school adolescents. *Computers in Human Behavior*, 18, 411–426.
- Morahan-Martin J, Schumacher P. (2000). Incidence and correlates of pathological Internet use among college students. *Computers in Human Behavior*, 16(1):13-29.
- Menon, Shanker, Narayanan, Lakshmi, and Kahwaji, Ahmad Taha (2018). Internet Addiction: A Research Study of College Students in India. *Journal of Economics and Business*, 1(1), 100-106.
- Odacı H, Çelik, ÇB. (2013). Who are problematic internet users? An investigation of the correlations between problematic internet use and shyness, loneliness, narcissism, aggression and self-perception. *Computers in Human Behavior*, 29, 2382–2387.
- Perlman, D. (2004). European and Canadian studies of loneliness among seniors. *Canadian Journal on Aging*, 23(2), 181-188.
- Rabadi, L., Ajlouni, M., Masannat, S., Bataineh, S., Batarseh, G. (2017). The Relationship between Depression and Internet Addiction among University Students in Jordan. *J Addict Res Ther*, 8, 349. doi:10.4172/2155-6105.1000349.
- Sharifpoor, E., Khademi, J.K., & Mohammadzadeh, A. (2017). Relationship of Internet Addiction with Loneliness and Depression among High School Students. *International Journal of Psychology and Behavioral Sciences*, 7(4), 99-102. doi: 10.5923/j.ijpbs.20170704.01
- Singh, H. (2015). Strategies for Development of Life Skills and Global Competencies. *International Journal of Scientific Research*, 4 (6), 760-763.
- Soulioti, E., Stavropoulos, V., Christidi, S., Papastefanou, Y., Roussos, P. (2018). The relationship of internet addiction with anxiety and depressive symptomatology, 29(2):160-171.
- Tiwari, P. & Ruhela, S. (2012). Social Isolation and Depression among Adolescent: A Comparative Perspective, *Paper presented at the 2nd International Conference on Social Science and Humanity*, Singapore.
- Tonioni F, D'Alessandris L, & Lai, C. (2012). Internet addiction: Hours Spent Online, Behaviors and Psychological Symptoms. *Gen Hosp Psychiatry*, 34, 80–87.
- Viñas F. (2009). Uso autoinformado de Internet en adolescentes: perfil psicológico de un uso elevado de la red. *Self-reported use of Internet among adolescents: Psychological profile of elevated internet use*, 9:109–122.
- Wilson, R.E., Gosling, S.D., & Graham, L.T. (2012). Loneliness and Risk of Alzheimer Disease. *Archives of General Psychiatry*, 64, 234-240.
- Yang, C. K. (2001). Sociopsychiatric characteristics of adolescents who use computers to excess. *Acta Psychiatrica Scandinavica*, 104, 217–222.

- Yang, C., Choe, B., Baity, M., Lee, J., & Cho, J. (2005). SCL-90-R and 16PF profiles of senior high school students with excessive internet use. *Can J Psychiatry*, 50, 407-14.
- Young, K. S., & Rogers, R. C. (1998). The relationship between depression and internet addiction. *CyberPsychology & Behavior*, 1, 25–28.
- Young, K. S. (2007). Cognitive behavior therapy with Internet addicts: treatment outcomes and implications. *CyberPsychology & Behavior*, 10(5), 671-679.
- Young, K. S. (2004). Internet addiction: A new clinical phenomenon and its consequences. *American behavioral scientist*, 48(4), 402-415.
- Yucens B., Uzer A. (2018). The relationship between internet addiction, social anxiety, impulsivity, self-esteem, and depression in a sample of Turkish undergraduate medical students. *Psychiatry Res*, 267, 313-318. doi: 10.1016/j.psychres.2018.06.033.